

Alcohol & Drug Use Disorders and Bipolar Disorder

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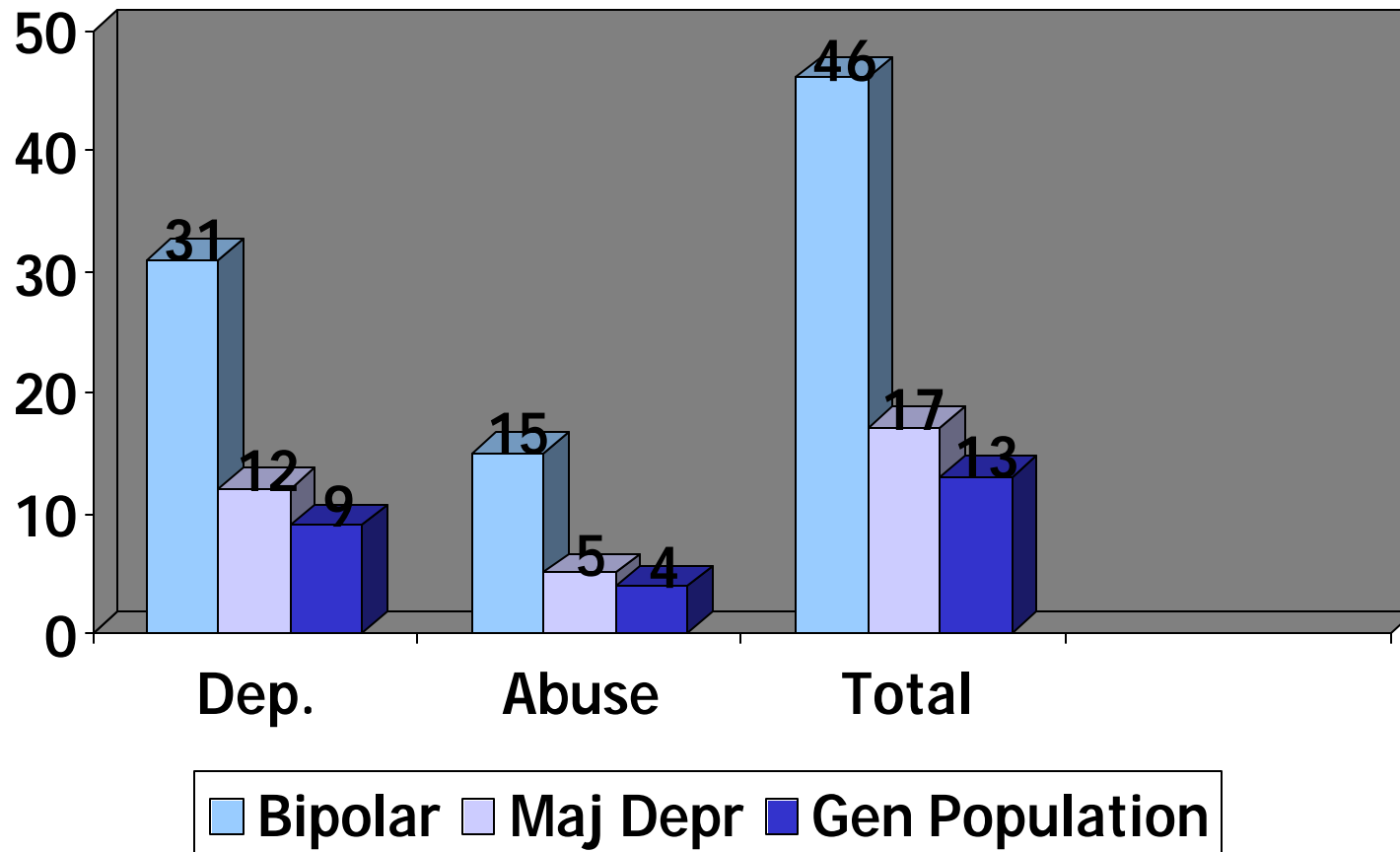
Prevalence

Over half of people with bipolar disorder will have a alcohol or drug use disorder

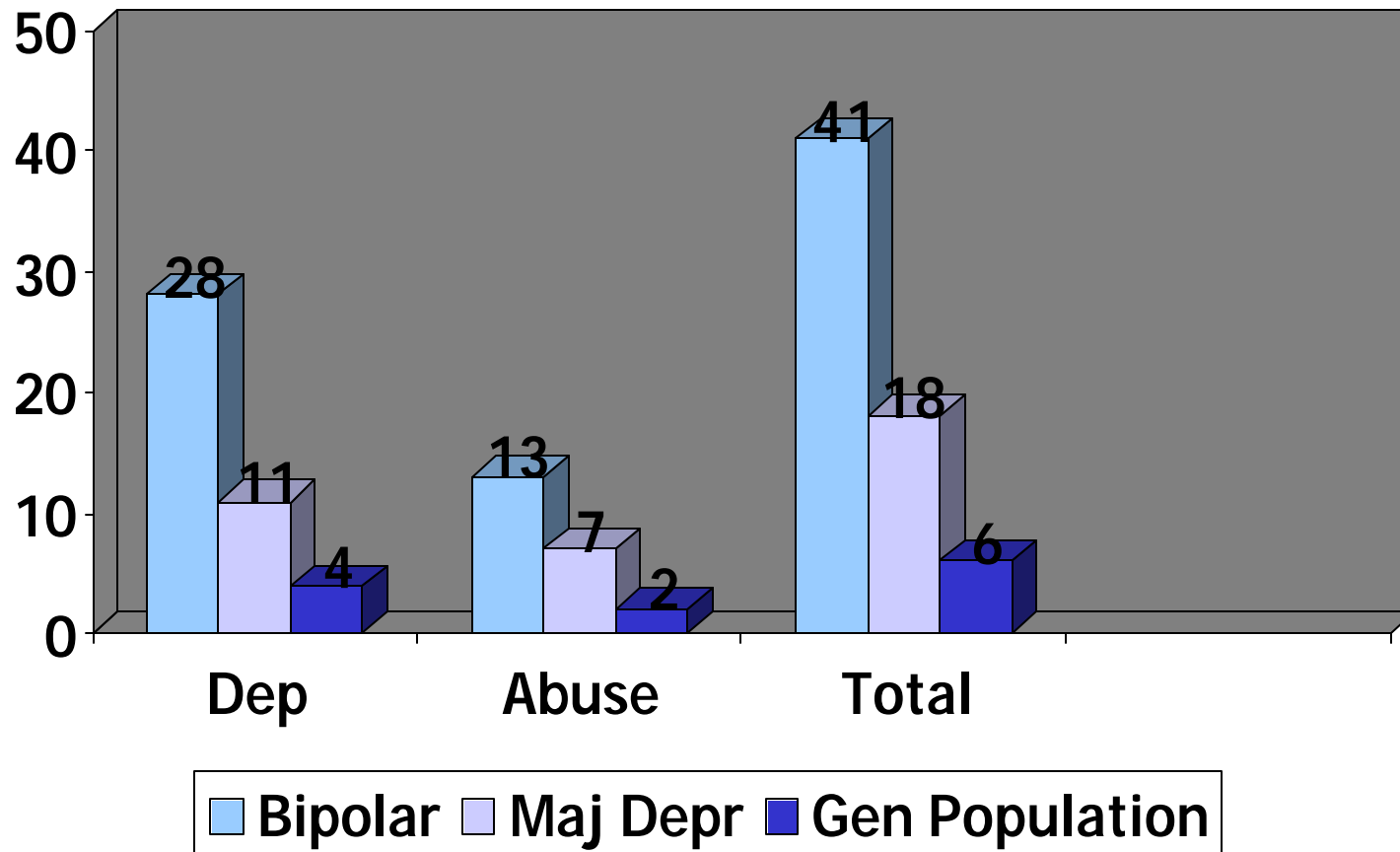
They are 10 & 8 times more likely to have an alcohol or drug use disorder

Mania more strongly related to alcohol or drug dependence than any other DSM axis I diagnosis, including Conduct Disorder

Alcohol-Bipolar Disorder Comorbidity ECA Study



Drug Use-Bipolar Dis. Comorbidity ECA Study



At least half of people with both bipolar disorder and an alcohol use disorder also have a drug use disorder

Bipolar Disorder Among Treatment-Seeking Samples of People with Alcohol and/or Drug Use Disorders

- Alcohol 2% - 9%
- Opioid 3% - 6%
- Cocaine 5% - 30%

Impact of Alcohol/Drug Use & Bipolar Disorder Comorbidity

- Poor treatment compliance
- Poor treatment response
- Poor psychosocial functioning
- Increased suicide and violence
- Increased service use

Impact of Alcohol and Drug Use Disorder on Bipolar Disorder

- **Course Modifier**
- **Episode Modifier**
- **Illness Outcome**

Alcohol and Drug Use as Course Modifiers of Bipolar Disorder

- Earlier Age of Onset
- Shorter cycle length between episodes
- Persistence of symptoms
- Delayed recovery & shortened time to relapse
- More Frequent episodes

Alcohol and Drug Use Disorders as Episode Modifiers of Bipolar Disorder

- Higher total number of symptoms
- Higher rate of depressive symptoms
- High frequency of rapid cycling, mixed, and dysphoric subtypes

Alcohol & Drug Use D/O's as Episode Modifier of Bipolar Disorder

- Increase abruptness and speed of the bipolar episode
- Episode progression, induce subtype “switch”
- Prolongation of the episode

Alcohol & Drug Use D/O's Impact on Outcome of Bipolar Disorder

- Enhanced Chronicity
- Enhanced Disability
- Increased Mortality

Treatment Issues

- Few controlled studies
- Only one study published to date
- Treatment based on clinical experience and follow certain general principles

Treatment Issues (cont'd)

- Screening for alcoholism and other PSUD
- Shared goals of achieving sobriety and stabilization of mood state
- Need to vigorously addressing alcoholism
- Need to address associated medical and psychosocial factors

Treatment Issues (cont'd)

- Treatment adherence & medication compliance
- Obstacles to treatment adherence
 - Accessibility & other system issues
 - Provider's reluctance
 - Patient & illness factors, e.g. grandiosity, denial, etc.

Treatment Issues (cont'd)

- Medications with abuse potential
- Medication use for suicidal patients
- Close monitoring of side effects & compliance
- Education, medications blood levels & Urine Drug Screening

Phases of Treatment

- Acute Phase
 - Engagement, detoxification, stabilization
- Continuation Phase
 - Consolidation of remission & sobriety; life style changes
- Maintenance Phase
 - Focus on relapse prevention & recovery

Psychosocial Interventions

- Chemical dependency counseling
- Sobriety/abstinence plan
- Counseling for bipolar disorder
- Self-help

Self-Help

- AA, NA
- Dual Recovery Self-help Groups
- Support to deal with occasional pressure to discontinue medications by some self-help groups

Pharmacotherapy

- Role of Lithium
- Anti-convulsants
 - divalproex
 - carbamazepine
 - gabapentin
- Antidepressants

Valproate Utility in Bipolar Alcoholics

- Alcoholism
 - May reduce alcohol craving
 - Alleviate alcohol withdrawal
 - Antikindling agent ?
- Bipolar subtypes: Mixed, dysphoric & rapid cyclers

Pharmacotherapy for People with Alcoholism & Drug Abuse

- Disulfiram
- Naltrexone
- Ondansetron?
- Topiramate?
- SSRI's in depressed DDX
- ?clonidine or lofexidine?
- buprenorphine
- methadone

METHODS

- Retrospective Study
- Setting: Large, urban, univ. based
- Sample: 255 acutely manic patients at initial evaluation
- 40 males/ 20 females with alcohol abuse/dep
- 80 males/ 115 females without alcohol abuse/dep
- Diagnostic Assess: IEF/ DSM-III
- Alcohol use: 4 points severity scale (0-3)

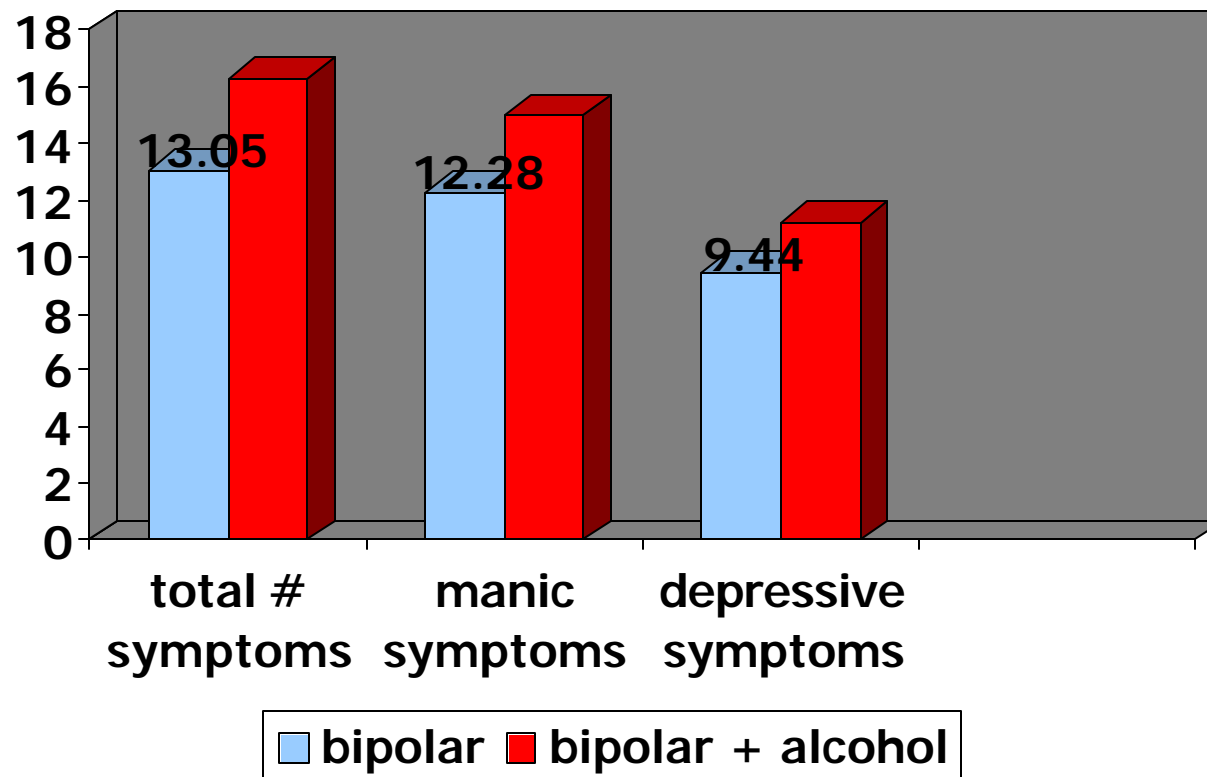
METHODS

- Variables Compared
 - Demographics
 - Mood related symptoms
 - Other drug use, and impulsive and violent behavior
- Statistical Analysis: Chi square and t-test

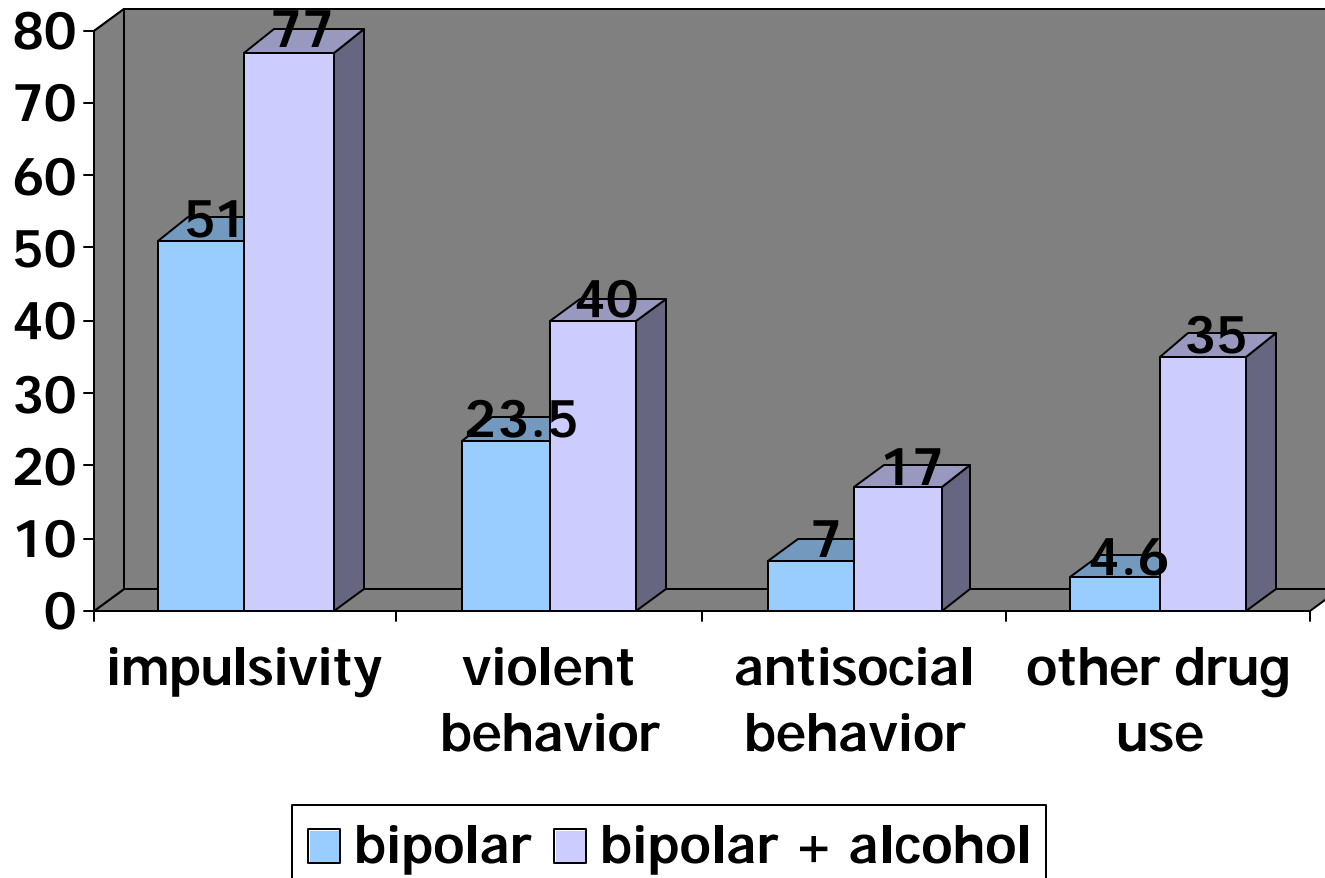
Gender Distribution

	Bipolar Only N=196		Bipolar + Alcohol N=60		
	n	%	n	%	p-value
Males	80	41	40	67	0.001
Females	115	59	20	33	

Significant Difference on Symptom Presentation

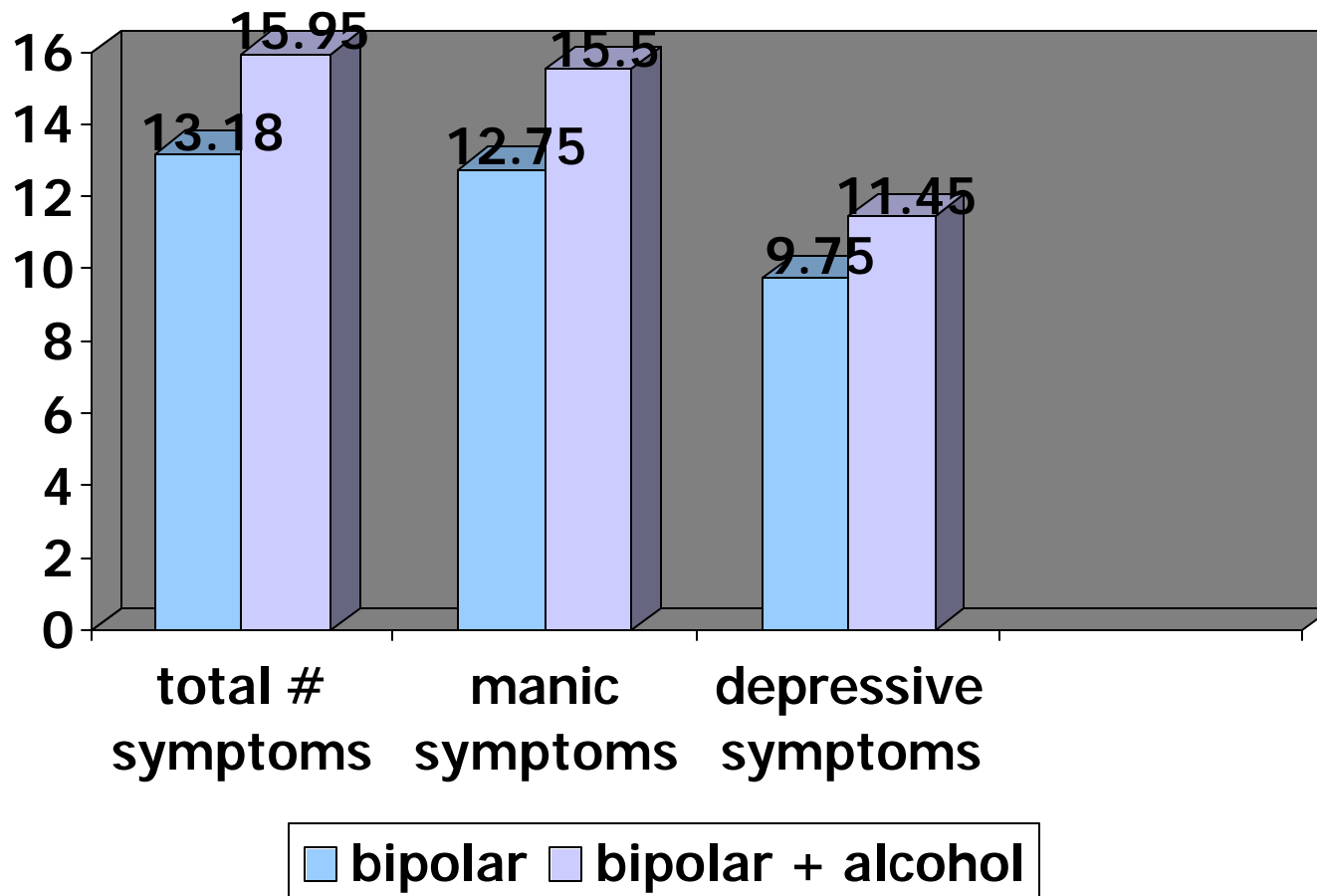


Significant Difference on Symptom Presentation



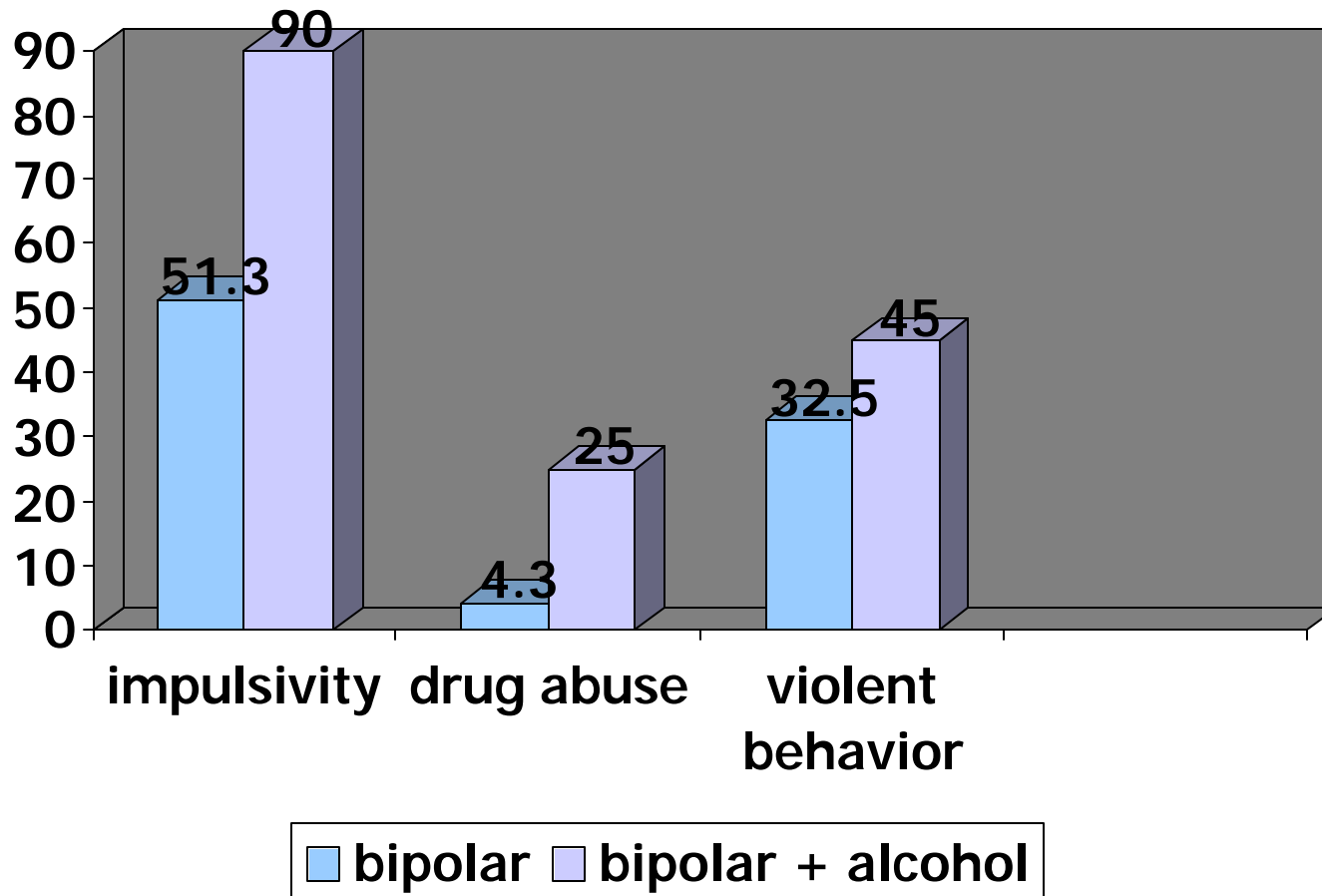
Symptomatic Differences

FEMALES



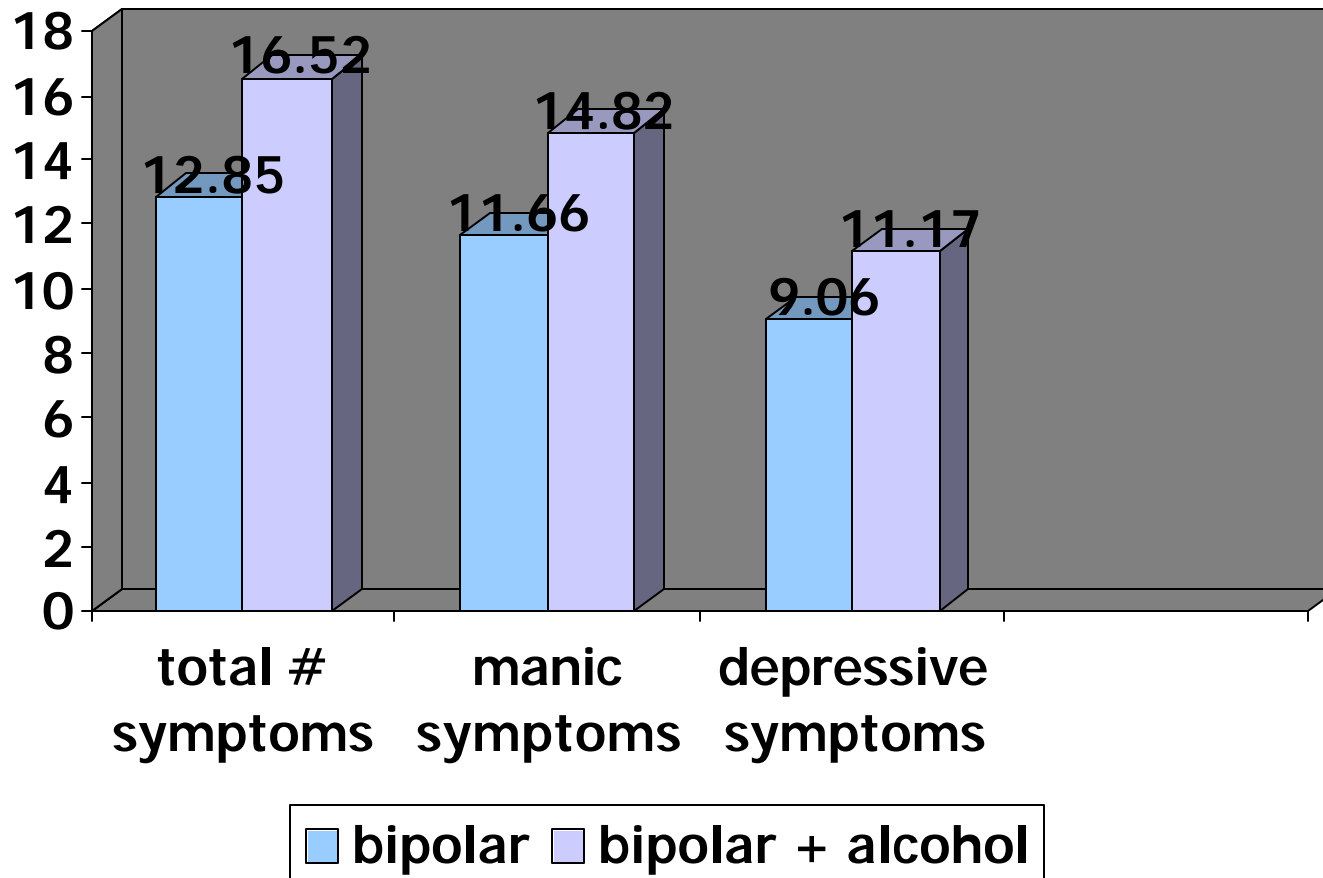
Symptomatic Differences

FEMALES



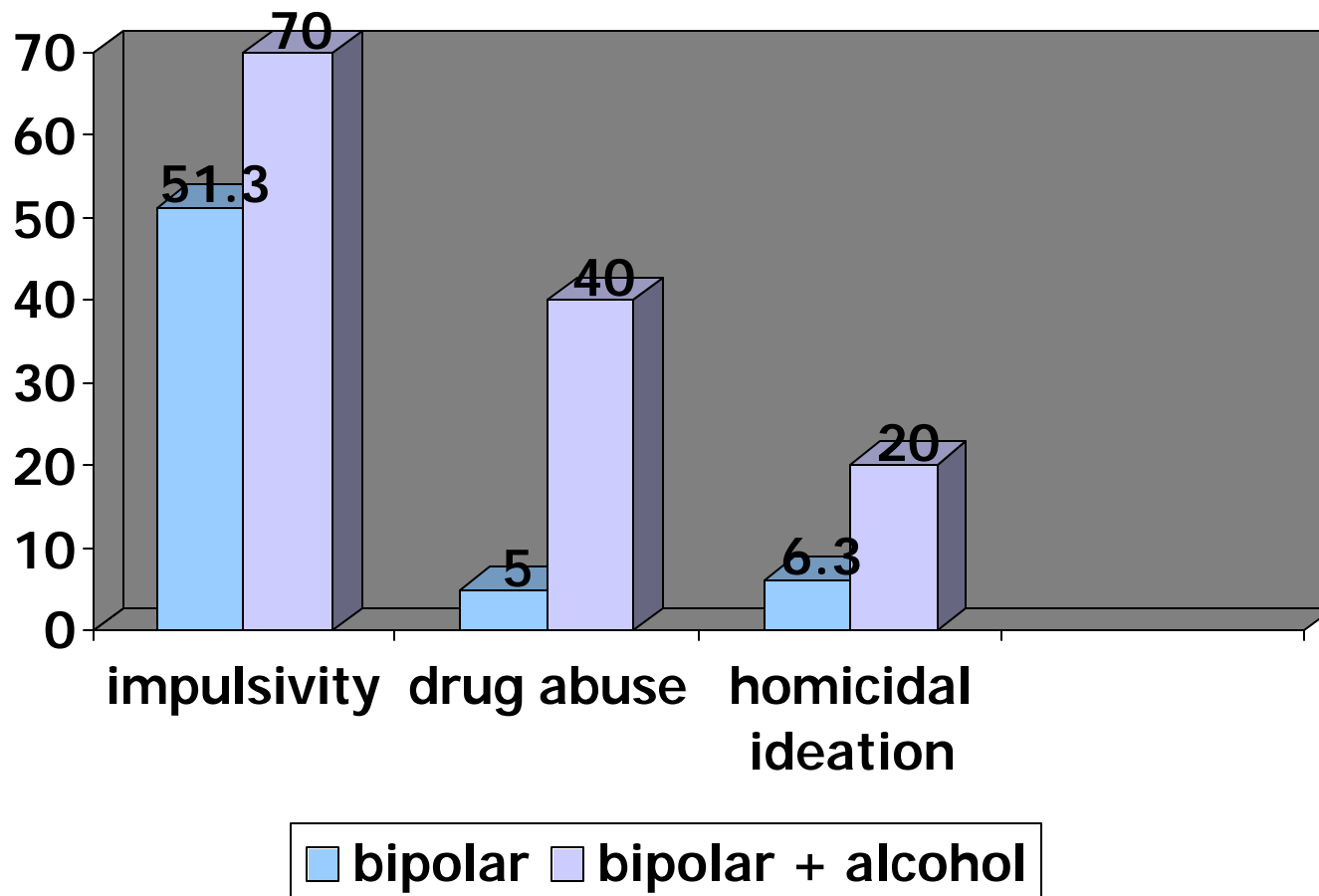
Symptomatic Differences

MALES



Symptomatic Differences

MALES



NIAAA Funded Trial Efficacy of Valproate Maintenance In Bipolar Alcoholics

- Double blind, placebo controlled, and randomized clinical trial
- Valproate+lithium vs. Placebo+lithium
- Dual disorder recovery counseling (weekly therapy session)

Assessment Instruments: Efficacy of Valproate Maint. In Bipolar Alcoholics

- Structured Clinical Interview for DSM-IV
- The Addiction Severity Index
- The Alcohol Use Inventory
- The Bech-Rafaelson Mania Scale
- The Hamilton Rating Scale for Depression

Assessment Instruments (cont'd): Efficacy of Valproate Maint. In Bipolar Alcoholics

- The Timeline Follow Back
- The Global Assessment Scale
- The Modified Quantitative Alcohol Inventory/Craving Scale
- The Weekly Self-Help Activity Quest.

Assessment Schedule: Efficacy of Valproate Maint. In Bipolar Alcoholics

- Every two weeks for 6 months
- Breath Alcohol Level and UDS
- Liver function tests (AST, ALT, gGTP, Al. Phos.) on weeks 2, 4, 8, 12, 16, 20, & 24.
- Lithium & valproate blood levels

Table 1. Demographic Variables

Age mean (sd)	37	(10)
Monthly Income(\$ mean, (sd)	1130	(1780)
Gender	N	%
Males	31	70.5
Females	13	29.5
Ethnicity		
Caucasians	32	73
African Americans	12	27
Marital Status		
Married	6	13
Separated/Divorced	19	43
Single	14	32
Education		
< 12 Years	12	19.4
12 Years	15	24.2
> 12 Years	31	50.0
Socioeconomic Class [*]		
I	5	11.4
II	9	20.5
III	30	68.1

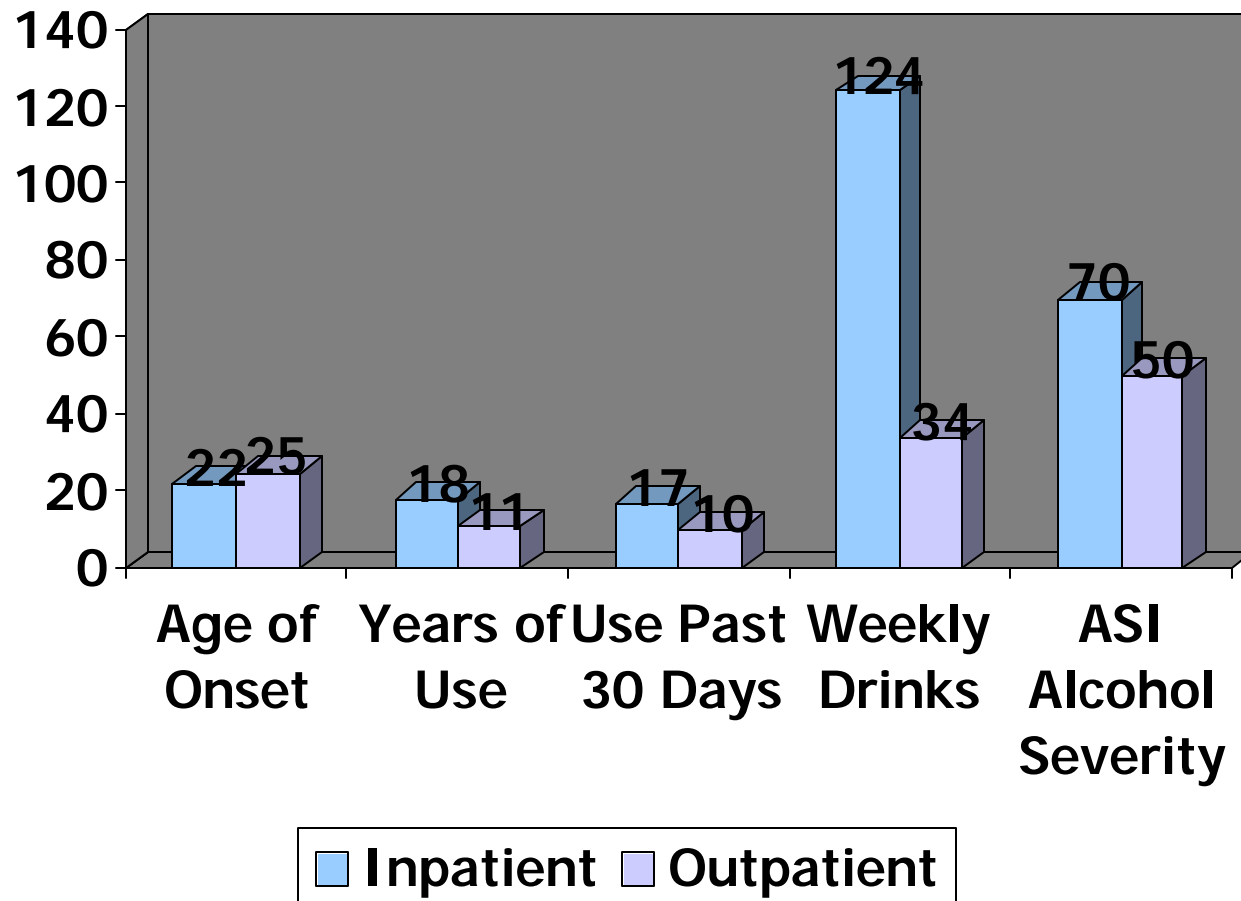
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Two Factors Hollingshead

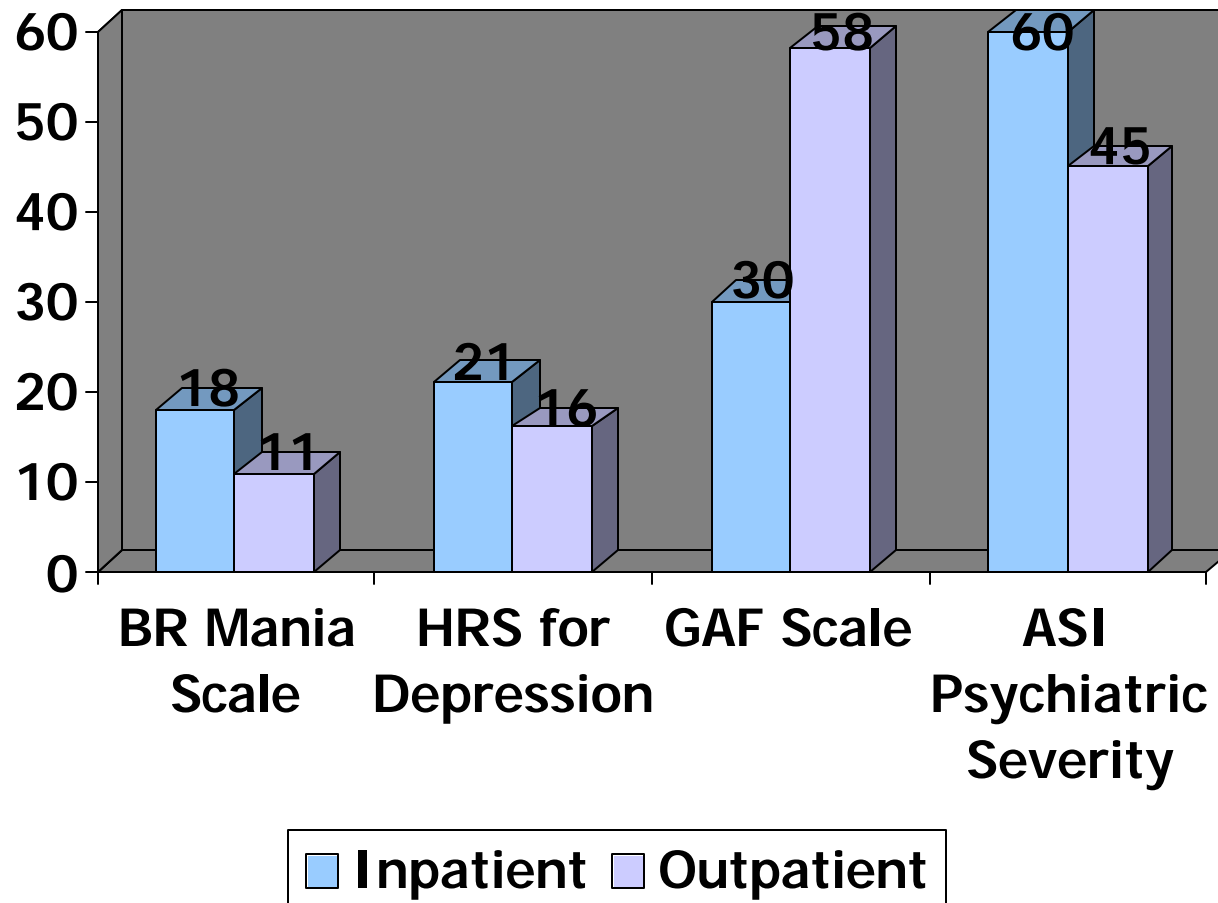
Table 2. Severity of Alcohol Use and Psychiatric Symptoms at Baseline

	mean	(sd)
Alcohol and Other Drug Use Severity		
Years Drinking to Intoxication	15.6	(10)
Days Drinking to Intoxication (Prior 30 Days)	14.5	(11.5)
Alcoholism Addiction Severity Index	0.64	(0.22)
Drug Problem Severity Index	0.07	(0.11)
Number of Weekly Drinks	91	(105)
Number of Weekly Cigarettes	129.1	(129)
Psychiatric Severity		
Psychiatric Severity Index	0.57	(0.19)
Bech Rafaelson Score	15.2	(10.9)
Hamilton Depression Scale	19.5	(11.0)
Global Assessment Scale	38.0	(15.8)
Bipolar Disorder Subtypes	n	%
Manic	9	(20.4)
Mixed	25	(56.8)
Depressed	10	(22.7)

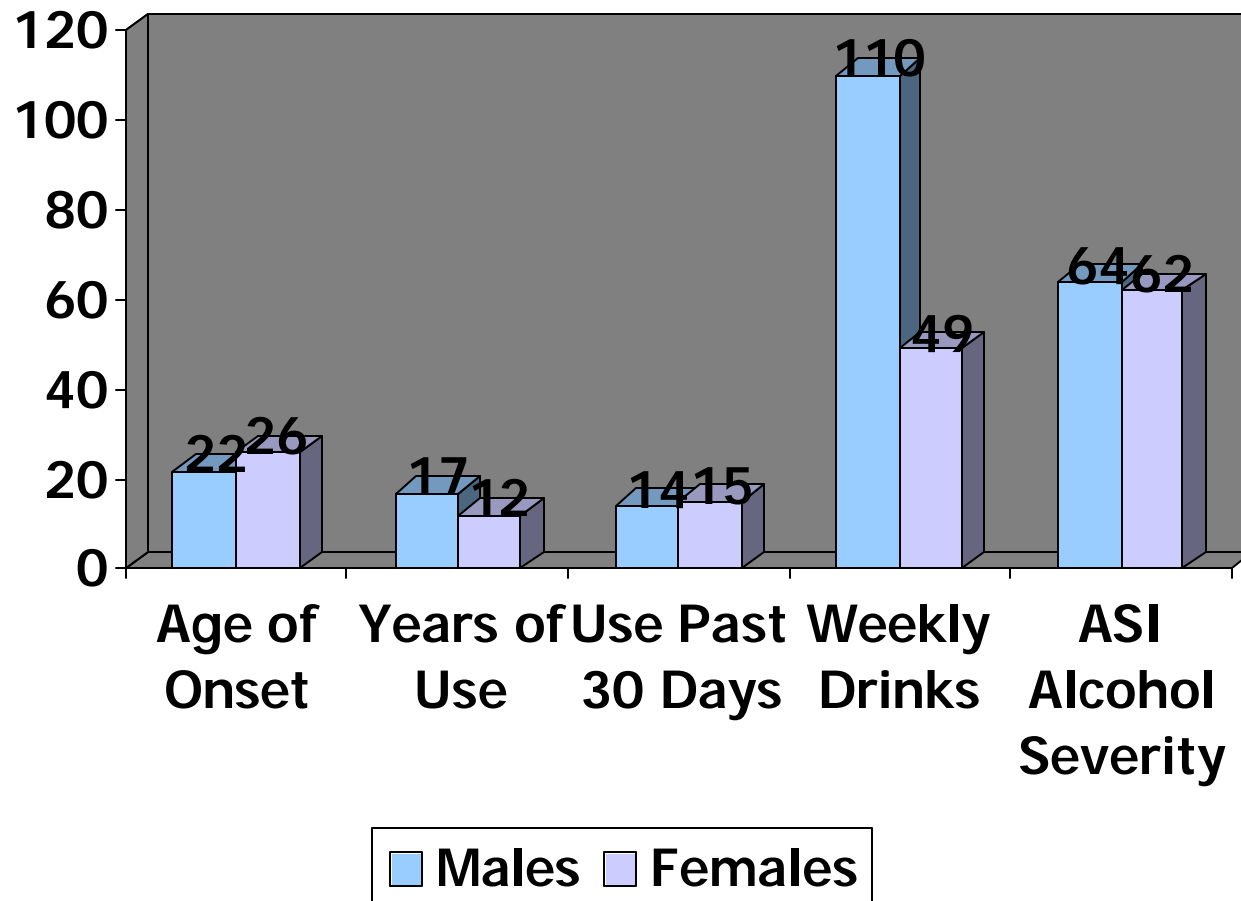
Alcohol Use History of Inpatient vs. Outp. Bipolar Alcoholics



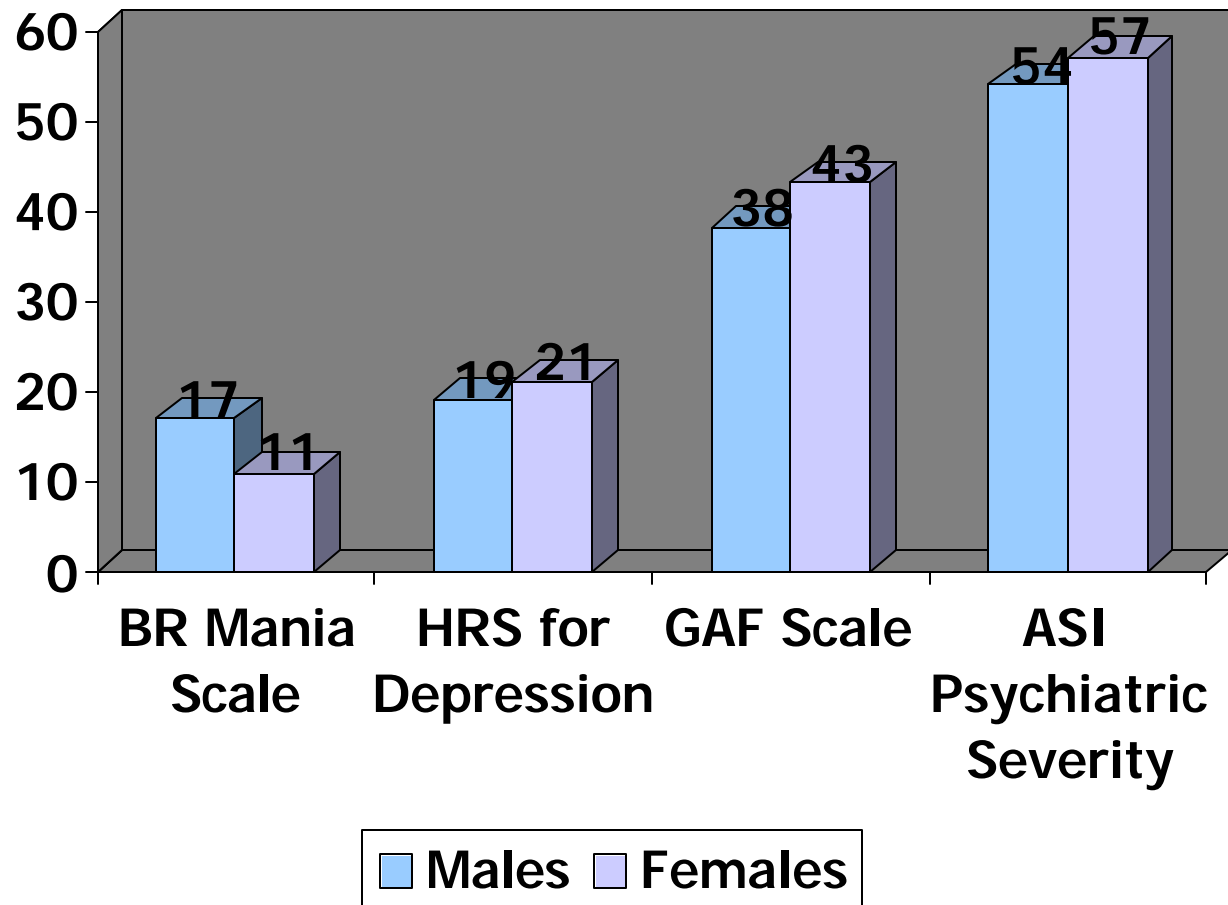
Symptoms Severity of Inpatient vs. Outp. Bipolar Alcoholics



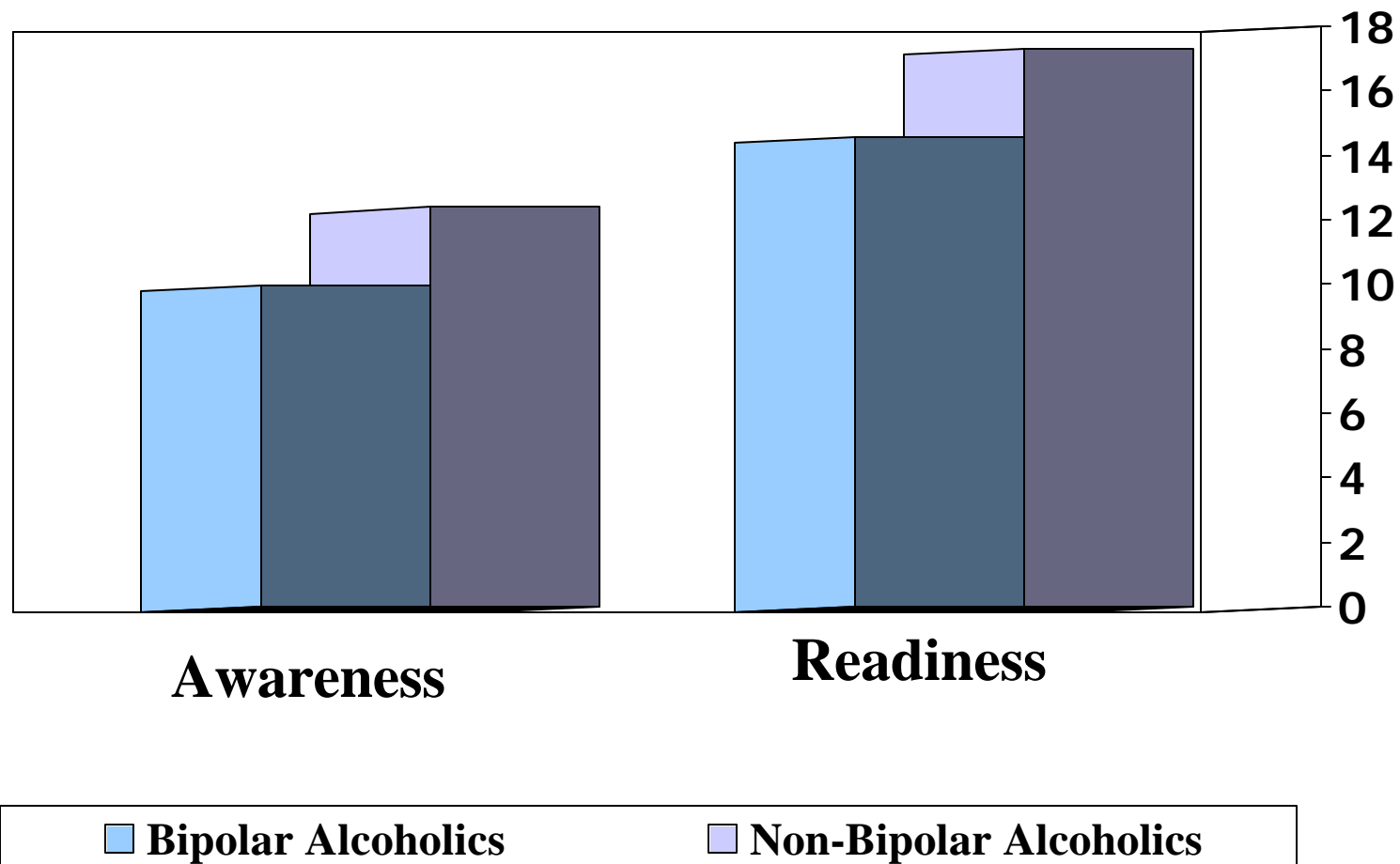
Alcohol Use History of Males vs. Females Bipolar Alcoholics



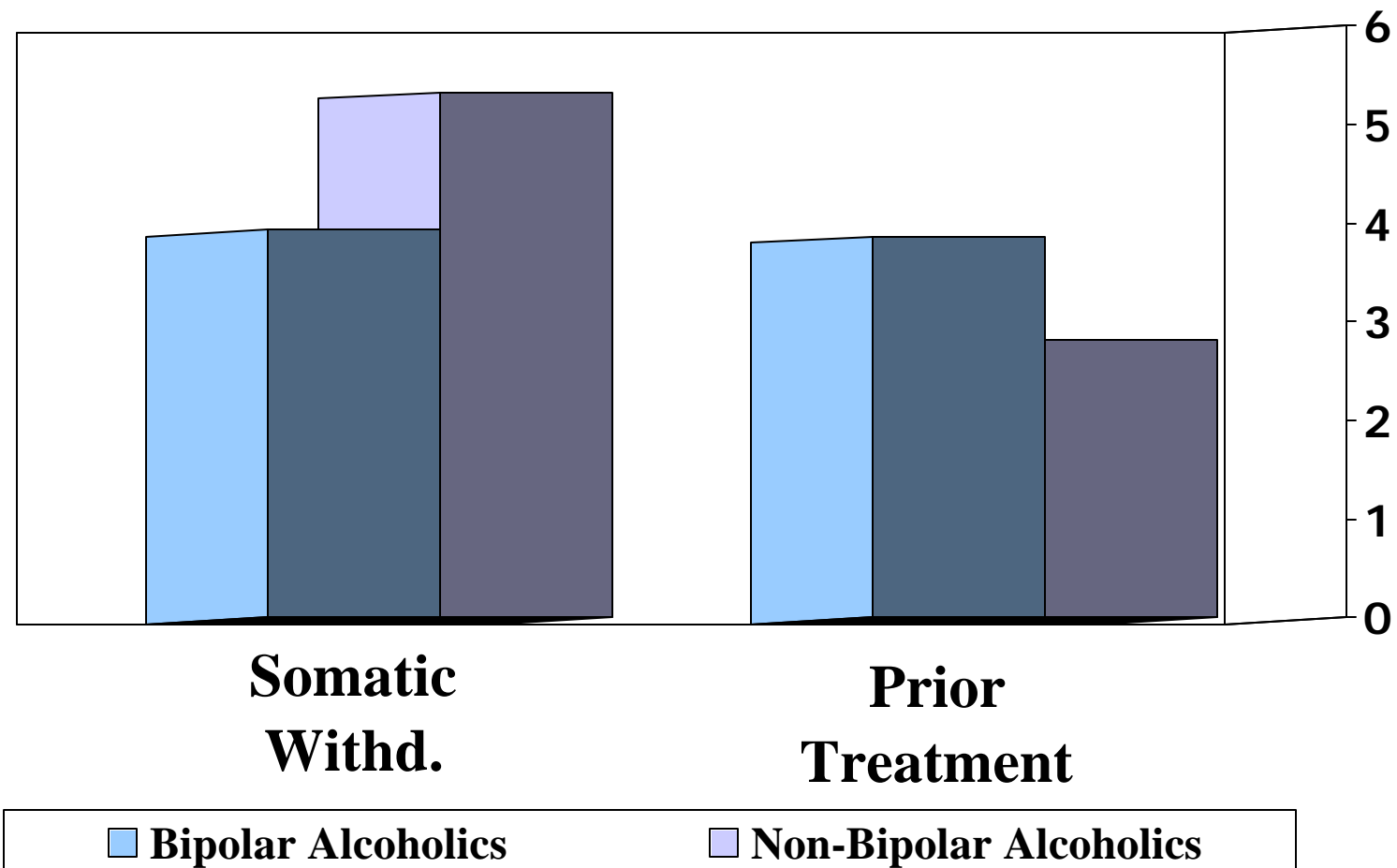
Alcohol Use History of Males vs. Females Bipolar Alcoholics



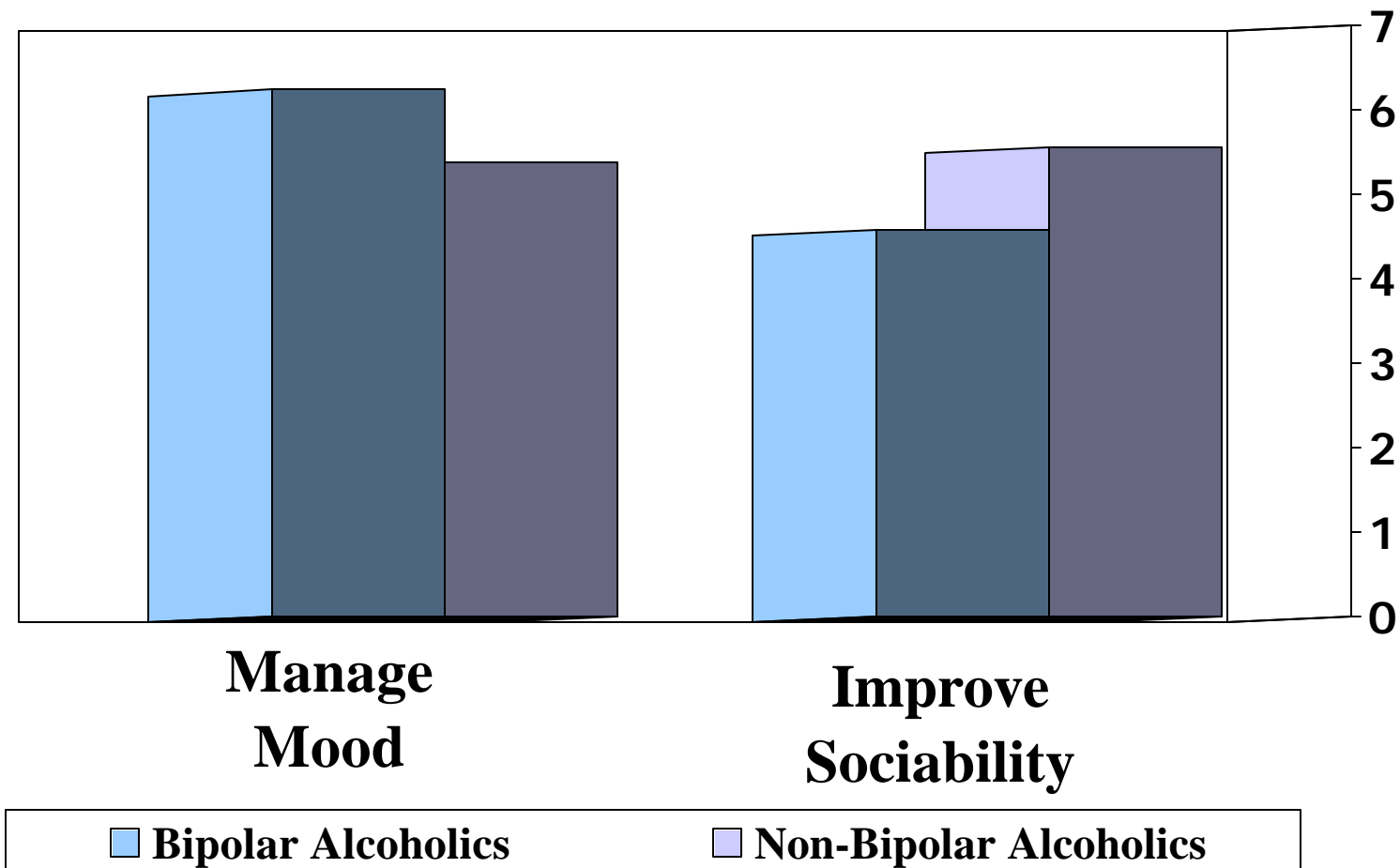
Comparison of Bipolar and Non-Bipolar Alcoholics on Awareness of Alcohol Problems and Readiness for Help



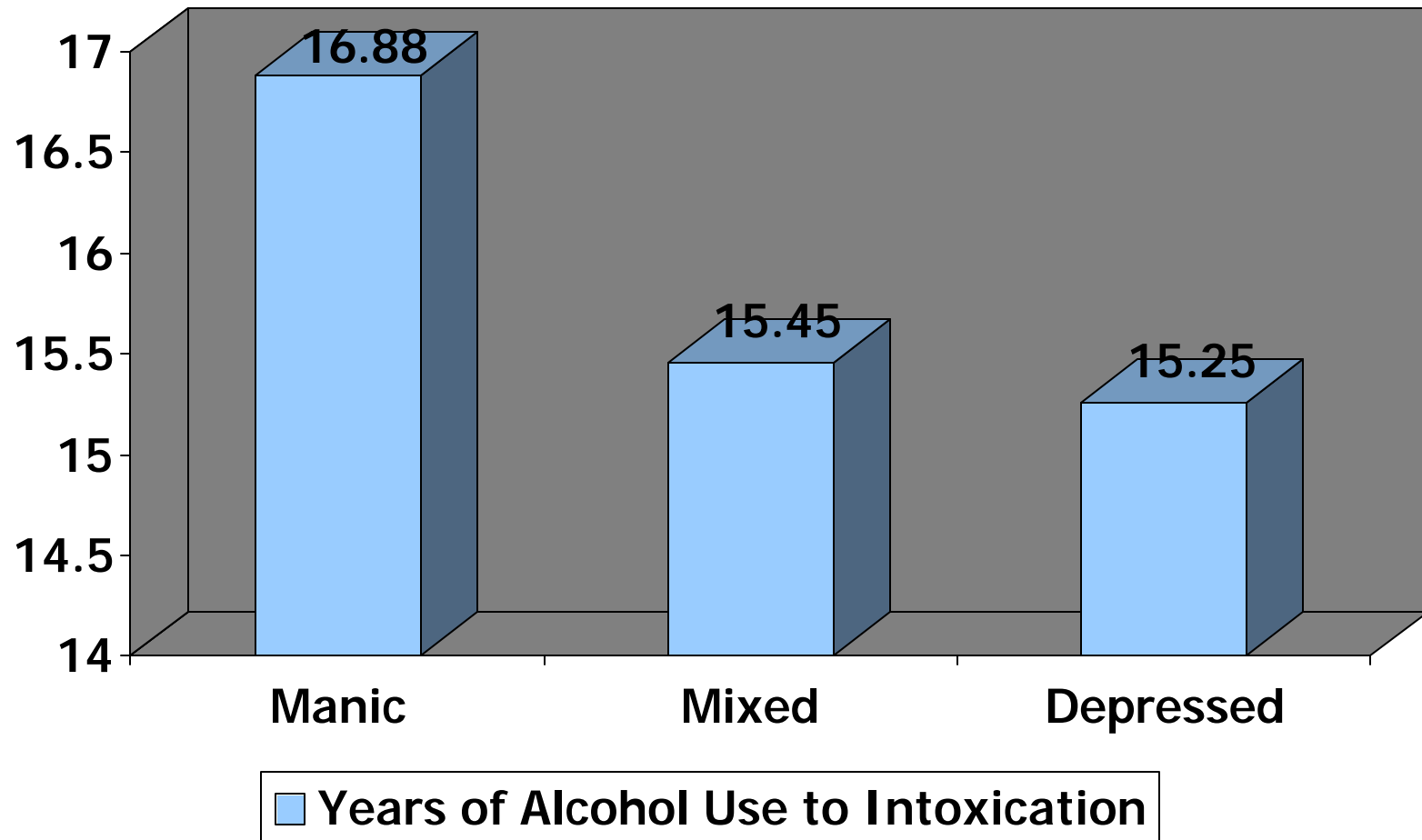
Comparison of Bipolar and Non-Bipolar Alcoholics on Somatic Withdrawal and Prior Help



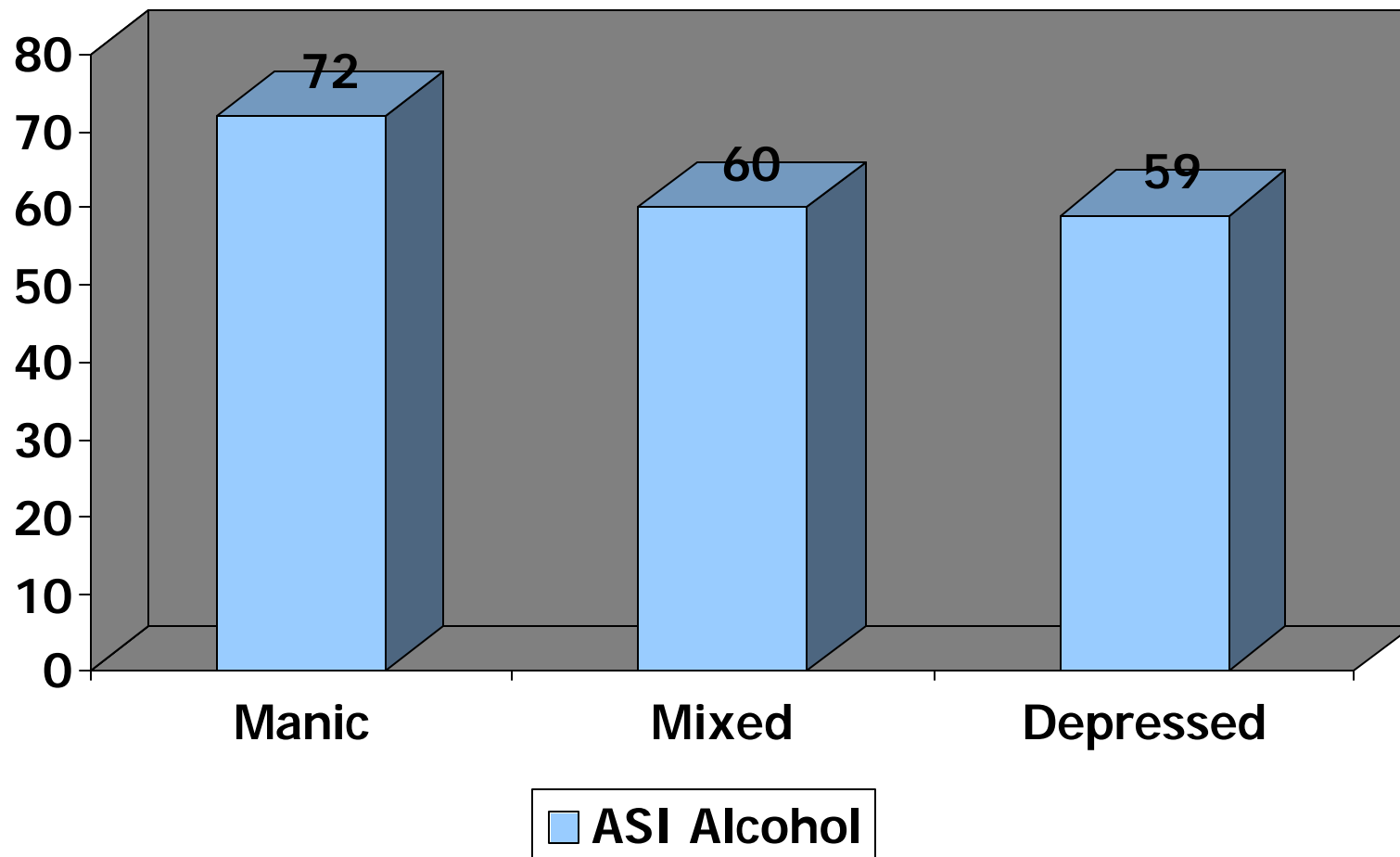
Comparison of Bipolar and Non-Bipolar Alcoholics on Drinks to Manage Mood & to Improve Sociability



Bipolar Subtypes and Severity of Alcohol Use: Life Time Years of Use to Intoxication



Bipolar Subtypes and Severity of Alcohol Use: ASI Alcohol Severity Index



Bipolar Subtypes and Severity of Alcohol Use: Timeline Weekly Drinks

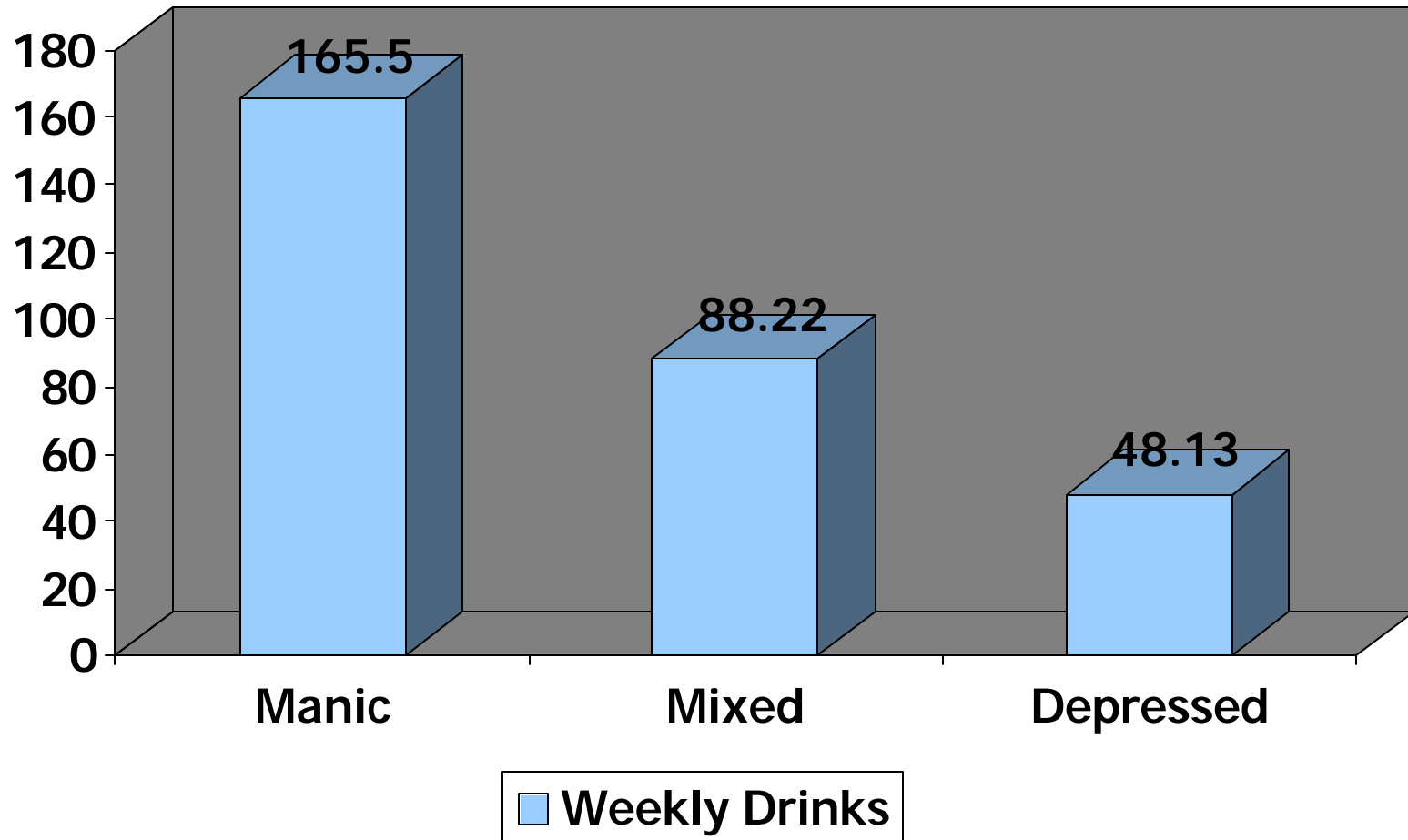


Table 3. Manic and Depressive Symptoms are Strongest Predictors of Alcohol Use among Bipolar Alcoholics

Fixed Effects	Coefficient	SE
Intercept	56.45	41.41
Assessment	-.56	.74
Age	-1.62*	.69
Ethnicity	-36.22*	15.03
Outpatient Sample	-30.48*	13.93
Socioeconomic Status	.64	.35
Alcohol Use to Intoxication (Past 30 days)	1.87**	.56
BR Mania Scale	2.32***	.44
HRS for Depression	2.06***	.43
Random Effects		
Initial status at baseline	1562.25 *	687.33
Linear rate of development	9.06	7.49
Correlations between random effects	-.72	
Fit statistics		
Deviance	26.75	
BIC (Bayesian Information Criteria -smaller better)	2690.4	

* p<.05; ** p<.01; *** p<.001

Clinical Treatment of Concurrent Bipolar I/ II & Substance Use Disorders

- **Establish abstinence: studies show bipolar depression, mania less common w/abstinence**
- **Rule out other causes: illnesses, injuries**
- **Rx: Lithium not as effective as valproate.**
Other effective Rx: carbamazepine, ?olanzepine, ?gabapentin, etc.: no controlled trials in sub abusers
- **Evidence for efficacy of cognit. psychotherapy**
- **Goal: avoid mixed episodes & rapid cycling periods**